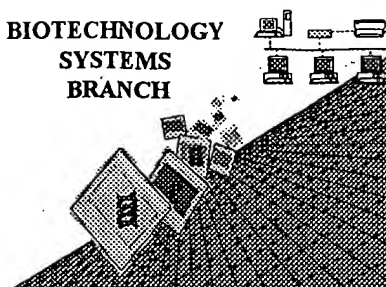


RAW SEQUENCE LISTING ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/980,523
Source: PCR/09
Date Processed by STIC: 12/21/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by the treatment given to all mail coming via the Brentwood Mail Facility.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom, including:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission

User Manual - ePAVE)

2. U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202

3. Hand Carry directly to:

U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
1911 South Clark Street, Crystal Mall One, Sequence Information, Arlington, VA 22202

Or

U.S. Patent and Trademark Office, 2011 South Clark Place, Customer Window, Box Sequence, Crystal Plaza Two,
Lobby, Room 1B03, Arlington, Virginia 22202

4. Federal Express Delivery, 2011 South Clark Street, Crystal Plaza 2, Room 1B03-Mailroom, Box Sequence,
Arlington, VA 22202

PCT09

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/980,523

DATE: 12/21/2001

TIME: 13:04:02

Input Set : A:\ES.txt

Output Set: N:\CRF3\12212001\I980523.raw

pp 1-4, 6
Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: BIOVECTOR THERAPEUTICS
 4 INSERT
 6 <120> TITLE OF INVENTION: POLYPEPTIDIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
 7 OR E7 OF HPV; THEIR PRODUCTION AND THEIR USE
 8 PARTICULARLY IN VACCINATION
 10 <130> FILE REFERENCE: WOB EPIT 2
 12 <140> CURRENT APPLICATION NUMBER: US/09/980,523
 13 <141> CURRENT FILING DATE: 2001-12-03
 15 <150> PRIOR APPLICATION NUMBER: FR 9907012
 16 <151> PRIOR FILING DATE: 1999-06-03
 18 <160> NUMBER OF SEQ ID NOS: 18
 20 <170> SOFTWARE: PatentIn Ver. 2.1

ERRORED SEQUENCES

22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 477
 E--> 24 <212> TYPE: ADN *invalid - use DNA (please consult sequence rules - see 1.823)*
 25 <213> ORGANISM: Human Papillomavirus
 27 <220> FEATURE:
 28 <221> NAME/KEY: CDS
 29 <222> LOCATION: (1)..(477)
 31 <400> SEQUENCE: 1
 32 atg cac caa aag aga act gca atg ttt cag gac cca cag gag cga ccc 48
 33 Met His Gln Lys Arg Thr Ala Met Phe Gln Asp Pro Gln Glu Arg Pro
 34 1 5 10 15
 36 aga aag tta cca cag tta tgc aca gag ctg caa aca act ata cat gat 96
 37 Arg Lys Leu Pro Gln Leu Cys Thr Glu Leu Gln Thr Thr Ile His Asp
 38 20 25 30
 40 ata ata tta gaa tgt gtg tac tgc aag caa cag tta ctg cga cgt gag 144
 41 Ile Ile Leu Glu Cys Val Tyr Cys Lys Gln Gln Leu Leu Arg Arg Glu
 42 35 40 45
 44 gta tat gac ttt gct ttt cgg gat tta tgc ata gta tat aga gat ggg 192
 45 Val Tyr Asp Phe Ala Phe Arg Asp Leu Cys Ile Val Tyr Arg Asp Gly
 46 50 55 60
 48 aat cca tat gct gta tgt gat aaa tgt tta aag ttt tat tct aaa att 240
 49 Asn Pro Tyr Ala Val Cys Asp Lys Cys Leu Lys Phe Tyr Ser Lys Ile
 50 65 70 75 80
 52 agt gag tat aga cat tat tgt tat agt ttg tat gga aca aca tta gaa 288
 53 Ser Glu Tyr Arg His Tyr Cys Tyr Ser Leu Tyr Gly Thr Thr Leu Glu
 54 85 90 95
 56 cag caa tac aac aaa ccg ttg tgt gat ttg tta att agg tgt att aac 336
 57 Gln Gln Tyr Asn Lys Pro Leu Cys Asp Leu Leu Ile Arg Cys Ile Asn
 58 100 105 110
 60 tgt caa aag cca ctg tgt cct gaa gaa aag caa aga cat ctg gac aaa 384
 61 Cys Gln Lys Pro Leu Cys Pro Glu Glu Lys Gln Arg His Leu Asp Lys

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/980,523

DATE: 12/21/2001

TIME: 13:04:02

Input Set : A:\ES.txt

Output Set: N:\CRF3\12212001\I980523.raw

```

62          115          120          125
64 aag caa aga ttc cat aat ata agg ggt cgg tgg acc ggt cga tgt atg      432
65 Lys Gln Arg Phe His Asn Ile Arg Gly Arg Trp Thr Gly Arg Cys Met
66          130          135          140
68 tct tgt tgc aga tca tca aga aca cgt aga gaa acc cag ctg tga      477
69 Ser Cys Cys Arg Ser Ser Arg Thr Arg Arg Glu Thr Gln Leu
70 145          150          155
110 <210> SEQ ID NO: 3
111 <211> LENGTH: 90
E--> 112 <212> TYPE: ADN same env
113 <213> ORGANISM: Artificial sequence
115 <220> FEATURE:
116 <223> OTHER INFORMATION: Description of the artificial sequence: fragment
117       of the sequence coding for E6 of HPV and corresponding
118       peptide sequence
120 <220> FEATURE:
121 <221> NAME/KEY: CDS
122 <222> LOCATION: (1)..(90)
124 <400> SEQUENCE: 3
125 cga ccc aga aag tta cca cag tta tgc aca gag ctg caa aca act ata      48
126 Arg Pro Arg Lys Leu Pro Gln Leu Cys Thr Glu Leu Gln Thr Thr Ile
127 1          5          10          15
129 cat gat ata ata tta gaa tgt gtg tac tgc aag caa cag tta      90
130 His Asp Ile Ile Leu Glu Cys Val Tyr Cys Lys Gln Gln Leu
131          20          25          30
150 <210> SEQ ID NO: 5
151 <211> LENGTH: 66
E--> 152 <212> TYPE: ADN
153 <213> ORGANISM: Artificial sequence
155 <220> FEATURE:
156 <223> OTHER INFORMATION: Description of the artificial sequence: fragment
157       of the sequence coding for E6 of HPV and corresponding
158       peptide sequence
160 <220> FEATURE:
161 <221> NAME/KEY: CDS
162 <222> LOCATION: (1)..(66)
164 <400> SEQUENCE: 5
165 cga cgt gag gta tat gac ttt gct ttt cgg gat tta tgc ata gta tat      48
166 Arg Arg Glu Val Tyr Asp Phe Ala Phe Arg Asp Leu Cys Ile Val Tyr
167 1          5          10          15
169 aga gat ggg aat cca tat      66
170 Arg Asp Gly Asn Pro Tyr
171          20
191 <210> SEQ ID NO: 7
192 <211> LENGTH: 87
E--> 193 <212> TYPE: ADN
194 <213> ORGANISM: Artificial sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of the artificial sequence: fragment

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/980,523

DATE: 12/21/2001

TIME: 13:04:02

Input Set.: A:\ES.txt

Output Set: N:\CRF3\12212001\I980523.raw

```

198      of the sequence coding for E6 of HPV and corresponding
199      peptide sequence
201 <220> FEATURE:
202 <221> NAME/KEY: CDS
203 <222> LOCATION: (1)..(87)
205 <400> SEQUENCE: 7
206 att agt gag tat aga cat tat tgt tat agt ttg tat gga aca aca tta      48
207 ile ser glu tyr arg his tyr cys tyr ser leu tyr gly thr thr leu
208   1             5             10             15
210 gaa cag caa tac aac aaa ccg ttg tgt gat ttg tta att      87
211 glu gln gln tyr asn lys pro leu cys asp leu leu ile
212           20             25
231 <210> SEQ ID NO: 9
232 <211> LENGTH: 66
E--> 233 <212> TYPE: ADN
234 <213> ORGANISM: Artificial sequence
236 <220> FEATURE:
237 <223> OTHER INFORMATION: Description of the artificial sequence: fragment
238      of the sequence coding for E6 of HPV and corresponding
239      peptide sequence
241 <220> FEATURE:
242 <221> NAME/KEY: CDS
243 <222> LOCATION: (1)..(66)
245 <400> SEQUENCE: 9
246 tgt cct gaa gaa aag caa aga cat ctg gac aaa aag caa aga ttc cat      48
247 cys pro glu glu lys gln arg his leu asp lys lys gln arg phe his
248   1             5             10             15
250 aat ata agg ggt cgg tgg      66
251 asn ile arg gly arg trp
252           20
271 <210> SEQ ID NO: 11
272 <211> LENGTH: 297
E--> 273 <212> TYPE: ADN
274 <213> ORGANISM: Human Papillomavirus
276 <220> FEATURE:
277 <221> NAME/KEY: CDS
278 <222> LOCATION: (1)..(297)
280 <400> SEQUENCE: 11
281 atg cat gga gat aca cct aca ttg cat gaa tat atg tta gat ttg caa      48
282 met his gly asp thr pro thr leu his glu tyr met leu asp leu gln
283   1             5             10             15
285 cca gag aca act gat ctc tac tgt tat gag caa tta aat gac agc tca      96
286 pro glu thr thr asp leu tyr cys tyr glu gln leu asn asp ser ser
287           20             25             30
289 gag gag gag gat gaa ata gat ggt cca gct gga caa gca gaa ccg gac      144
290 glu glu glu asp glu ile asp gly pro ala gly gln ala glu pro asp
291           35             40             45
293 aga gcc cat tac aat att gta acc ttt tgt tgc aag tgt gac tct acg      192
294 arg ala his tyr asn ile val thr phe cys cys lys cys asp ser thr

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/980,523

DATE: 12/21/2001

TIME: 13:04:02

Input Set : A:\ES.txt

Output Set: N:\CRF3\12212001\I980523.raw

```

295      50      55      60
297 ctt cgg ttg tgc gta caa agc aca cac gta gac att cgt act ttg gaa 240
298 Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile Arg Thr Leu Glu
299 65      70      75      80
301 gac ctg tta atg ggc aca cta gga att gtg tgc ccc atc tgt tct cag 288
302 Asp Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile Cys Ser Gln
303      85      90      95
305 aaa cca taa 297
306 Lys Pro
336 <210> SEQ ID NO: 13
337 <211> LENGTH: 69
E--> 338 <212> TYPE: ADN
339 <213> ORGANISM: Artificial sequence
341 <220> FEATURE:
342 <223> OTHER INFORMATION: Description of the artificial sequence: fragment
343 of the sequence coding for E7 of HPV and corresponding
344 peptide sequence
346 <220> FEATURE:
347 <221> NAME/KEY: CDS
348 <222> LOCATION: (1)..(69)
350 <400> SEQUENCE: 13
351 gga gat aca cct aca ttg cat gaa tat atg tta gat ttg caa cca gag 48
352 Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu Asp Leu Gln Pro Glu
353 1      5      10      15
355 aca act gat ctc tac tgt tat 69
356 Thr Thr Asp Leu Tyr Cys Tyr
357 20
376 <210> SEQ ID NO: 15
377 <211> LENGTH: 51
E--> 378 <212> TYPE: ADN
379 <213> ORGANISM: Artificial sequence
381 <220> FEATURE:
382 <223> OTHER INFORMATION: Description of the artificial sequence: fragment
383 of the sequence coding for E7 of HPV and corresponding
384 peptide sequence
386 <220> FEATURE:
387 <221> NAME/KEY: CDS
388 <222> LOCATION: (1)..(51)
390 <400> SEQUENCE: 15
391 caa gca gaa ccg gac aga gcc cat tac aat att gta acc ttt tgt tgc 48
392 Gln Ala Glu Pro Asp Arg Ala His Tyr Asn Ile Val Thr Phe Cys Cys
393 1      5      10      15
395 aag 51
396 Lys
415 <210> SEQ ID NO: 17
416 <211> LENGTH: 57
E--> 417 <212> TYPE: ADN
418 <213> ORGANISM: Artificial sequence
420 <220> FEATURE:

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RAW SEQUENCE LISTING

DATE: 12/21/2001

PATENT APPLICATION: US/09/980,523

TIME: 13:04:02

Input Set : A:\ES.txt

Output Set: N:\CRF3\12212001\I980523.raw

421 <223> OTHER INFORMATION: Description of the artificial sequence: fragment
422 of the sequence coding for E7 of HPV and corresponding
423 peptide sequence
425 <220> FEATURE:
426 <221> NAME/KEY: CDS
427 <222> LOCATION: (1)..(57)
429 <400> SEQUENCE: 17
430 ttg gaa gac ctg tta atg ggc aca cta gga att gtg tgc ccc atc tgt 48
431 Leu Glu Asp Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile Cys
432 1 5 10 15
434 tct cag aaa 57
435 Ser Gln Lys

09/980,523 6

<210> 18

<211> 19

<212> PRT

<213> Artificial sequence

<223> Description of the artificial sequence: fragment
of the sequence coding for E7 of HPV and corresponding
peptide sequence

→ <2207 ← insert
this

mandatory

numeric
identifier

wherever <2207,
<2227, or <223>
is shown

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/980,523

DATE: 12/21/2001

TIME: 13:04:03

Input Set : A:\ES.txt

Output Set: N:\CRF3\12212001\I980523.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:24 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:112 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:138 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:152 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:179 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:193 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:219 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:233 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:259 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:273 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:338 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:364 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:378 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:403 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:417 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:442 M:258 W: Mandatory Feature missing, <220> FEATURE: